

A New Marine Mollusk from Mozambique in the Genus *Festilyria* PILSBRY & OLSSON, 1954

(GASTROPODA : VOLUTIDAE)

BY

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(Plate 60; 1 Map)

IN 1966 I OBTAINED for Mr. John duPont, a shell which had been dredged in 40 fathoms of water off Boa Paz, Mozambique, Portuguese East Africa. The specimen was empty but in excellent condition (see Plate 60, Figures 1 and 2). Subsequently, I learned of the existence of a second conspecific shell dredged alive in about 12 fathoms of water 150 miles northeast of Lourenço Marques, a town only a few miles south of Boa Paz (see Map). This specimen, with animal preserved, is in the collection of the Department of Mollusks, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts. These 2 specimens seem to belong to a hitherto unknown species.

The new species appears to be related to both *Festilyria ponsonbyi* (E. A. SMITH, 1901) (see Plate 60, Figures 3 and 4) and *F. festiva* (LAMARCK, 1811) (Plate 60, Figures 5 and 6). It is unfortunate that the animals of these 2 species are unavailable for study. However, there are sufficiently strong morphological differences between the 3 taxa to warrant specific separation.

In my arrangement of subfamilial and generic classification I follow PILSBRY & OLSSON, 1954.

Fulgorarinae PILSBRY & OLSSON, 1954

1954. *Fulgorarinae* PILSBRY & OLSSON, Bull. Amer. Paleont. 35 (152): 16

Festilyria PILSBRY & OLSSON, 1954

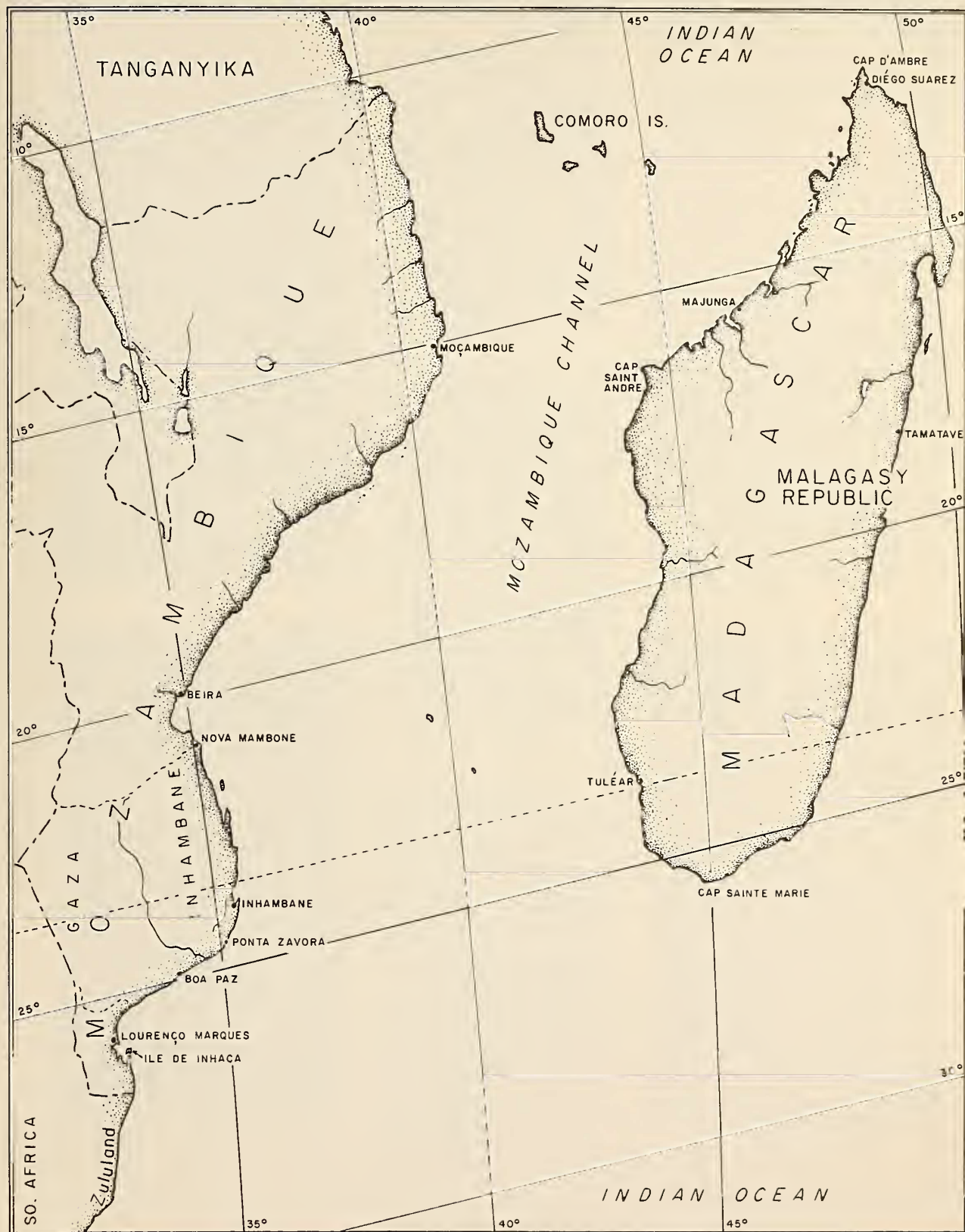
1954. *Festilyria* PILSBRY & OLSSON, Bull. Amer. Paleont. 35 (152): 24

Type Species: *Voluta festiva* LAMARCK, 1811, by OD. Recent, Africa.

Distribution: In addition to the new taxon being described below, there are 3 other Recent species in the genus, all of which inhabit moderately deep water off East Africa. They are *Festilyria africana* (REEVE, 1856), *F. festiva* (LAMARCK, 1811), and *F. ponsonbyi* (E. A. SMITH, 1901). Two species, *F. africana* and *F. ponsonbyi*, are known almost exclusively from specimens removed from the stomachs of fishes.

Diagnosis: Shells medium to large, solid, ovate or fusiform. Spire high or low, turreted, or with rounded shoulders; apex blunt. Protoconch pupiform, medium to large, smooth. Teleoconch sculpture consists of shoulder nodules or sharp tubercles which may or may not continue from suture to suture as low, rounded axial ribs. Aperture semi-ovate. Outer lip simple, slightly thickened, bevelled. Columella with 3 rather strong anterior plaits (the second being strongest), followed by several weak plaits covering $\frac{1}{2}$ to $\frac{2}{3}$ parietal area. A black callus or blotch may or may not be present at upper and lower end of columella. Siphonal notch narrow, deep; fasciole weak, without defining ridge. Periostracum absent; horny operculum present (Plate 60, Figure 7).

Remarks: PILSBRY & OLSSON (1954) stated that a fasciole was absent in the type species, *Festilyria festiva*. This must have been a *lapsus* on their part as I have examined a large adult specimen of *F. festiva* at the American Museum of Natural History, New York City, and observed a distinct fasciole. Mr. John duPont confirmed this observation when he examined several specimens of *F. festiva* at the British Museum (Natural History), London. Apparently the lack of a defining fasciole ridge caused this error. Furthermore, some books have



drawings of *F. festiva* that show a distinct fasciole (KIE-
NER, 1839, plt. 22, fig. 2, dorsal view) and some show
none at all (REEVE, 1849, plt. 12, fig. 28b). This, no
doubt, has also contributed to the error.

Festilyria duponti WEAVER, spec. nov.

(Plate 60, Figures 1 and 2)

Type Specimens: Holotype, Delaware Museum of Nat-
ural History No. 13706; Paratype, Museum of Com-
parative Zoology, No. 262150.

Type Locality: In 40 fathoms of water off Boa Paz,
Mozambique, Portuguese East Africa.

Range: From waters off Boa Paz to a point 150 miles
northeast of Lourenço Marques (24° 64' S; 34° 50'
E).

Habitat: The only known living specimen (Paratype)
was dredged in 12 fathoms; substrate unknown.

Dimensions: Holotype length 124.4 mm, maximum dia-
meter 56.5 mm, aperture length 72.6 mm, maximum dia-
meter of 2nd protoconch whorl 3.5 mm.

Description: Shell moderately large for genus, solid,
elongate-fusiform. Spire high, turreted, with rounded
apex. Protoconch pupiform, rather large, of 2½ smooth,
deeply sutured, flesh-colored whorls. Teleoconch of about
5½ strongly turreted and sculptured whorls. Sculpture on
early whorls consists of axial ribs, 15 such ribs on pen-
ultimate whorl of holotype, diminishing to blunt shoulder
nodules on later whorls. On early teleoconch whorls
axial ribs are crossed by many closely spaced revolving
lirae which disappear on later whorls. At anterior tip
of adult body whorl are 8 or more strong revolving lirae
bordering the fasciole. Aperture wide, semi-ovate, about
⅔ total length of shell. Outer lip simple, slightly thickened,
bevelled. Columella arched, with 3 rather strong anterior
plaits (the second being strongest), followed posteriorly

by 4 weaker plaits to midpoint on columella. Siphonal
notch narrow, deep; fasciole weak. A black callus at pos-
terior junction of outer lip with parietal wall and a black
blotch at anterior end of columella. Base color flesh, pro-
fusely overlaid with revolving zones of pinkish-brown
blotches; the narrow, pale, intermediate areas crossed by
numerous, short, curved, irregular pinkish-brown lines.
Inner edge of outer lip spotted with black where revolving
pinkish-brown lines terminate. A large horny operculum
is present.

Animal and Radula: Top of broadly expanded foot
creamy-white with numerous closely spaced reddish-brown
lines radiating outwards. These lines often split and ana-
stomose. Siphon and tentacles encircled by narrow bands
of reddish-brown.

I have not had the opportunity to study the anatomy
of the soft parts of the paratype at Harvard.

Remarks: Before comparing *Festilyria duponti* with its
closest relative, *F. festiva*, the following remarks should
be noted: The holotype of *F. festiva* illustrated in this
paper is a juvenile shell and I have no photograph of
an adult specimen. Therefore, I have referred to REEVE
(1849, plt. 12, fig. 28a) in making comparisons with a
fully adult shell, as well as referring to my notes on the
adult shell I studied at the American Museum of Natural
History in New York.

Festilyria duponti differs from *F. festiva* as follows:
Shell is smaller, lighter in weight, and more attenuated in
outline; strongly shouldered and turreted whorls are in
sharp contrast to gently sloping non-turreted whorls of
F. festiva; ribs do not run from suture to suture (other
than on first 2 teleoconch whorls); protoconch is smaller
and has 1 less whorl.

Compared to *Festilyria ponsonbyi*, *F. duponti* exhibits
the following differences: It has ribs which terminate
posteriorly as low nodules rather than the ribless pointed
tubercles of *F. ponsonbyi*; protoconch is twice as large;
shell is larger and more attenuated; no black callus or
blotch appears on the parietal area of *F. ponsonbyi*.

Explanation of Plate 60

Figures 1 and 2: *Festilyria duponti* WEAVER, spec. nov. Holotype,
ex DMNH no. 13706; dredged dead in 40 fathoms off Boa Paz,
Mozambique. Height 124.4 mm; maximum diameter 56.5 mm;
photographs by Clifton Weaver.

Figures 3 and 4: *Festilyria ponsonbyi* (E. A. SMITH, 1901), ex
duPont collection, from the stomach of a fish caught off Durban,
Natal, Republic of South Africa. Height 100.8 mm; maximum dia-
meter 51.2 mm; photographs by Clifton Weaver.

Figures 5 and 6: *Festilyria festiva* (LAMARCK, 1811). Holotype, ex
MNHN, general collection of Volutidae No. 57; "Africa," a juve-

nile specimen; height 71 mm, maximum diameter 31.5 mm; photo-
graphs courtesy Mr. H. Chevallier, MNHN.

Figure 7: Operculum from paratype of *Festilyria duponti* WEAVER,
spec. nov., ex MCZ no. 262150; animal dredged alive in 12 fathoms,
150 miles northeast of Lourenço Marques, Mozambique; photo-
graph courtesy Dr. Ruth Turner, MCZ.

Explanation of abbreviations used: DMNH=Delaware Museum
of Natural History, Greenville, Delaware. MCZ=Museum of
Comparative Zoology, Harvard University, Cambridge, Massachu-
setts.

MNHN=Muséum National d'Histoire Naturelle, Paris,
France.

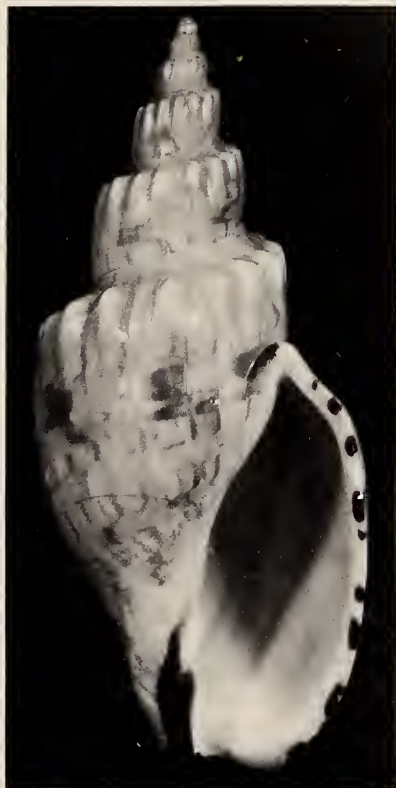


Figure 1



Figure 5



Figure 2



Figure 6



Figure 3



Figure 7



Figure 4